

Claims

1. Curling machine provided with an adjusting device for evenly winding elongated workpieces into spirals, comprising a machine frame (1) sustaining a worktable (2); a mandrel (3) usable for a curling operation and provided with counteracting means of elongated workpieces passing through said worktable (2), characterized in that said counteracting means comprises an actuator which is fixed on said worktable (2) and provided with a rod (23) carrying a tool holder (24) in the free end of the rod, said mandrel (3) being removable from the worktable (2).
2. Machine according to claim 1, characterized in that said tool holder (24), which is carried by the free end of said actuator rod (23), supports an idle rotating roller (26) acting as a counteracting means for an elongated workpiece to be submitted to a curling operation; said elongated workpiece being rotated by said mandrel (3), which is provided with a removable tool (4) for the curling operation.
3. Machine according to claim 1, characterized in that mounted to said mandrel (3) is a pipe bending die (30), and said tool holder (24), which is carried by the free end of said actuator rod, supports a corresponding bending counter-die (32).
4. Machine according to claim 1, characterized in that mounted on said worktable (2), instead of said curling mandrel, is a jaw holder bridge (41) having workpiece holder jaws (45, 46) adjustable in their reciprocal distance; and

said tool holder, which is carried by the free end of said actuator rod, supports a drawing/tapering tool (48).
5. Machine according to claim 1, characterized in that mounted on said worktable (2) is a punching counter-die (50); and

said tool holder (24), which is carried by the free end of said actuator rod (23), supports a punch (48).

6. Machine according to claim 1, characterized in that mounted on said worktable (2) is a bending die (60); and
said tool holder (24), which is carried by the free end of said actuator rod (23), supports a bending counter-die (61).

7. Machine according to claim 1, characterized in that said actuator is an oleodynamic cylinder (21).